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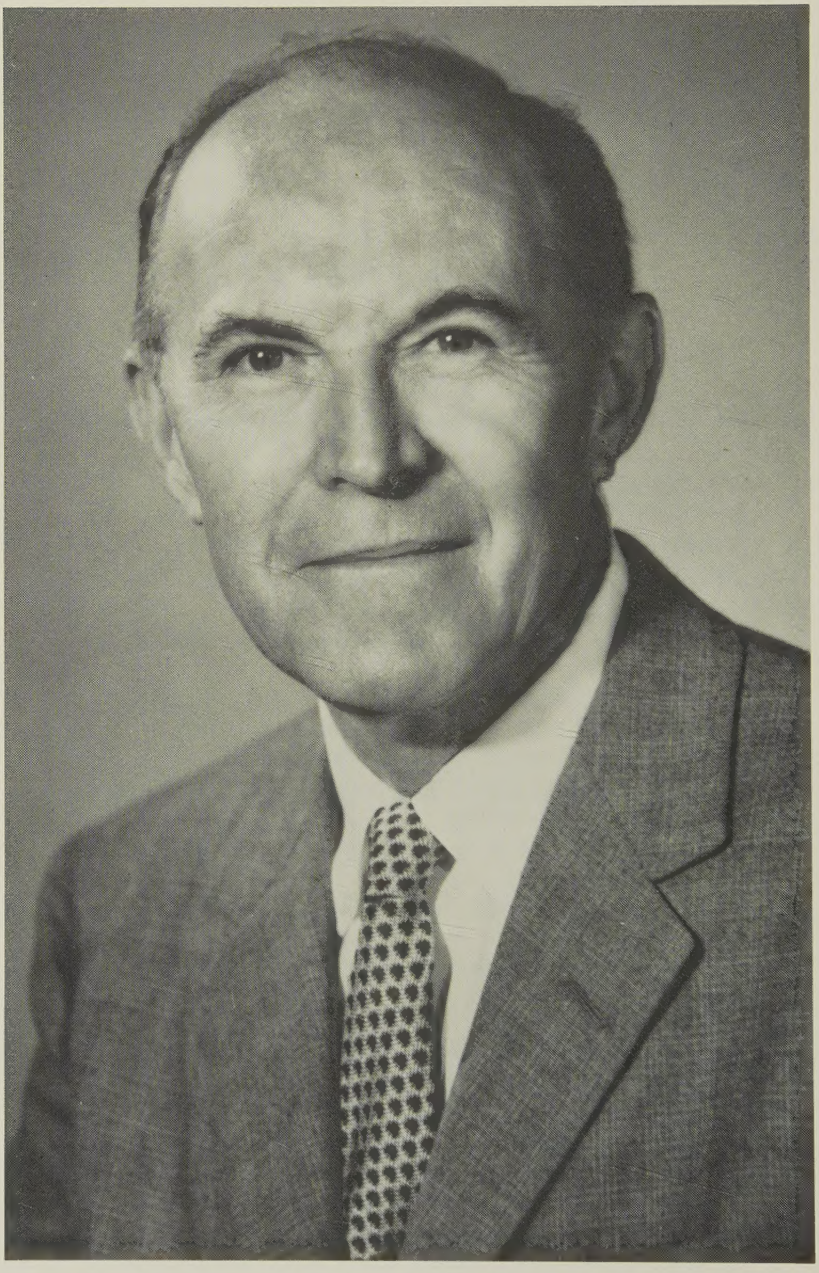

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EDWIN H. BRYAN, JR.

INTRODUCTION
SOME PACIFIC SCIENTISTS I HAVE KNOWN

as told by
EDWIN H. BRYAN, JR.
after a birthday dinner in his honor on
April 13, 1968

I ARRIVED IN HONOLULU on the Matson steamship *Wilhelmina* July 4, 1916. What befell me prior to that date is of little importance to this story, except that I might explain why I came to Hawaii. My uncle, Dr. Robert Day Williams, Professor of Philosophy and Psychology at Pomona College, had invited me to live with him while I went to college after graduation from Redlands High School in 1916. The year before that he had accepted the presidency of a private school in Honolulu. He wrote, "I can't give you a home in Claremont, but we have a little 'cow college' in our front yard, and the offer still stands." Why did I go? Why did the Polynesians settle new islands? It was the old story of frustrations behind and brighter prospects ahead.

The College of Hawaii was small in 1916, but many of its professors were of high caliber and both they and the students were eager and energetic. Our freshman class numbered 16, and the entire student body only 110, including 66 "specials." The President, Dr. Arthur L. Dean, was a quiet, friendly, studious New Englander, active in many affairs. His administrative duties did not prevent him from teaching organic chemistry and doing considerable research on such subjects as the use of chaulmoogra oil in treating leprosy, now called Hansen's disease. I remember how, in 1918, he conducted the course entitled "War Aims and Citizenship" for the Student Army Training Corps unit, and made it so interesting that almost the entire student body attended its sessions. In 1916 to 1917 there were only 23 other persons on the faculty: 12 professors, 3 assistant professors, 7 instructors, and one librarian.

I will discuss only a few of these. My favorite was Vaughan MacCaughey. He looked so young that he grew a Vandyke beard to keep from being mistaken for a student. The students didn't wear beards in those days. He taught all the botany, posting a meticulous outline of subject matter and assignments for us to follow. The entire class in general botany could take field trips in Harry Denison's jalopy, which we did frequently. Professor MacCaughey was accused jocularly of writing a popular scientific article every morning before breakfast. He gave me a thick file of his reprints, which I treasure. Even his rival spcialists admit that his "Phytogeography of Manoa Valley" (1917) was a fine piece of original research. It was probably he who infected me with "scribbilitus." At least it was he who kindled my interest in Hawaiian natural history.

No anecdote concerning the College of Hawaii would be complete without mention of Professor John S. Donaghho. He *was* the Department of Mathematics and Astronomy. Through his sympathetic cooperation, my interest in astronomy developed into a major avocation. We shared the use of the College of Hawaii Observatory out in Kaimuki, which was referred to contemptuously as a "shabby cheesebox topped by half a grapefruit." It was he who urged the production of a monthly star chart, which has appeared in the *Honolulu Advertiser* since December, 1922, now furnished regularly by Bishop Museum's Planetarium.

I never took a course from Professor Harold S. Palmer, but I made several field trips with him. He was a geologist. One semester, when he was away on sabbatical, I taught his orientation course in biology, referred to as "smatterology"; everything from the origin of life to dietetics. My wife once took a summer course from him and says that his informal classes in geology were "conducted on a conversational level and well illustrated, so that they made geology come alive."

Some of my other professors, with mention of the courses I took from them, were: John Mason Young (mechanical drawing); Arthur R. Keller (surveying); Frank T. Dillingham (chemistry); Arthur L. Andrews (English); Louis A. Henke (agriculture); and Romanso Adams (economics).

The professor who probably had the greatest influence on my career was David L. Crawford. I took all the entomology he had to offer and liked it, later teaching the same courses myself. I had entered the College of Hawaii to major in sugar technology. Two summers of work on plantations (1917 at Aiea and 1918 at Ewa), while interesting, had dimmed the glamour of that profession. Besides, during World War I, I enlisted in the army and was assigned to the College of Hawaii S.A.T.C. Here the officer who inspected our unit suggested that I might be useful to the sanitary corps; so I took

courses in bacteriology and medical entomology. (I admit I wasn't much of a fighting solider, but as Acting First Sergeant I marched the company through Honolulu in the Armistice Day parade.) After our discharge in December, 1918, I changed my major to general science.

One day in the spring of 1919 Professor Crawford said to me, "Would you like a summer job in entomology? Dr. Gregory is looking for someone to care for the insect collection at Bishop Museum." I started work on July 1, 1919. I even spent the previous week at the Experiment Station of the Hawaiian Sugar Planters' Association, learning the approved mounting and labeling technique from Otto H. Swezey. He had been the Honorary Curator of Entomology at Bishop Museum since 1906, and continued as Consulting Entomologist until his death November 3, 1959, at the age of 90.

My uncle and his family left Hawaii in 1918, and, following war duty in Europe, he returned to Pomona College. After I got out of the army, I lived in the home of Joseph and Dorothea Emerson. Their son, Oliver, had also been in the S.A.T.C. Mr. Emerson was a retired land surveyor, with great interest in Hawaiian lore and land shells. Living in his family was a liberal education in Hawaiiana, and I continued to live there until 1920, sharing my days between the College of Hawaii in the mornings and Bishop Museum in the afternoons.

During my senior year my most interesting subject was systematic botany. Being the only student in the class, it amounted to my being Joseph F. Rock's assistant. He even paid me 25 cents an hour for helping him. He would dictate the main facts about a plant species, and then turn me loose to hunt up and fill in the details. In this way "we" monographed the Hawaiian species of Pittosporum, *Plantago,* and a few other genera. We ended the course by identifying and mapping all the plants set out on the college campus, for which I supplied the map, made in my surveying class. Finally we cataloged and arranged the extensive herbarium that he had built up, identifying as many species as we could before Professor Rock left the employ of the College of Hawaii and I graduated, in 1920. When, in 1922, the Rock plant collection was transferred to Bishop Museum, it was like greeting an old friend.

Mr. Rock was an excellent photographer and a self-made botanist. He had attended the University of Vienna; but I was told that when he came to Hawaii in search of health, and became a teacher at Mid-Pacific Institute in 1907, he knew very little about systematic botany. The indoor work being detrimental to his health, he got an outdoor job collecting for the Hawaii Board of Commissioners of Agriculture and Forestry, working very closely with Ralph S. Hosmer, Superintendent of Forestry. In September, 1908, he

made a field trip with Bishop Museum Botanist Charles N. Forbes and showed him a tree he had seen two months earlier. Forbes described it as *Euphorbia rockii,* and an interesting friendship began. The speed with which Rock became an expert on the Hawaiian flora, as shown by the high quality of his *Indigenous Trees of the Hawaiian Islands* (1913), *Ornamental Trees of Hawaii* (1917), and various monographic studies, was little short of miraculous. After leaving Hawaii he distinguished himself by his explorations in central China. Alvin Chock's excellent account (1963), following Rock's death on December 5, 1962, makes it unnecessary to say more about this great and inspiring botanist.

Let us leave the College of Hawaii, on the eve of its becoming a University, and take a look at Bishop Museum prior to 1920. The earliest published list of the staff I could find appeared in the Report of the Director for 1898 (Brigham, 1898). It indicates that Director William Tufts Brigham had been assisted that year by Acland Wansey (general curator) and John J. Green (printer). The resignation of Wansey, October 6, 1898, left the Director without any curatorial assistance until the arrival of John F.G. Stokes from Australia on February 15, 1899. In addition to serving as general assistant, Stokes also acted as librarian. It was fortunate for Bishop Museum that Mr. Brigham was an enthusiastic reader. He procured all the publications about the Pacific area that his budget could afford. Later these works would have been very expensive, if not impossible to get. As the well illustrated and popular Bishop Museum *Memoirs* grew in number, many scientific serials were obtained by exchange.

Mr. Brigham (he later received an Sc.D. from Columbia) was an "artistic naturalist of the old school." He was interested in everything, particularly what had to do with the Pacific area, but did not specialize in any field too deeply. He was largely responsible for planning Bishop Museum buildings, "the last word in museum design" at the time. He surrounded himself with his "boys" and all museum activities revolved about him. He published extensively on volcanoes, plants, many aspects of Pacific anthropology, and even an Index to Pacific Islands, compiled from his extensive reading. His "boys" referred to him (among themselves) as "Pater." Some, at least those who stayed with him very long, gave him absolute allegiance. He made two trips around the world (1896 and 1912) to visit museums, and describes in detail many Pacific specimens that he saw.

Closest to him was John Stokes, who worked chiefly on Polynesian ethnology, and took charge of museum activities when "Pater" was away. He was a hard worker and an apt pupil, but he lacked formal college training, especially in anthropological methods. His major shortcoming was his

Bishop Museum staff picture, ca. 1901. On staircase, left to right: Director William Tufts Brigham, John J. Green, Alvin Seale, William A. Bryan, J. F. G. Stokes. Below: Allen M. Walcott.

desire to pursue every subject to its ultimate. Since available information did not permit doing this, much was started, but comparatively little was completed to his own satisfaction, and as a result remained unpublished.

There were three of Brigham's "boys" who had left the Museum before I joined the staff. They were Allen M. Walcott, Alvin Seale, and William Alanson Bryan. Allen Walcott I never met. He arrived August 14, 1899, after army service in the Philippines. He was Brigham's immediate clerical

assistant, and one of his achievements was the bound accession record which he rewrote in 1901. The staff picture, taken on the steps of Hawaiian Hall between 1900 and 1901, shows him as a tall, dapper-looking man with a small mustache.

Alvin Seale I knew much later when he was Director of the Steinhart Aquarium in Golden Gate Park, San Francisco. He had been employed by Bishop Museum as "collector" from 1899 to 1903. In 1900 he had made a successful expedition to Guam, collecting and reporting chiefly on birds and fish. During 1901 and 1902 he had visited a number of islands in the Society, Austral, Marquesas, Tuamotu, Mangareva, New Hebrides, and Solomon groups. He collected a few excellent artifacts, including a large Solomon Island canoe, but the only natural history specimens on which he published were fishes. Between and after these major trips he teamed up with W.A. Bryan to collect Hawaiian birds. After leaving Bishop Museum, he was in the Philippines from 1907 to 1917. Then, as he delighted to put it, "A Seale became superintendent of the aquarium in San Francisco." Much concerning these adventures he recounts in a popular book, *Quest for the Golden Cloak and Other Experiences of a Field Naturalist,* published in 1946, an autographed copy of which he gave me.

William Alanson Bryan was obtained by Bishop Museum from Chicago, September 29, 1899. He became Curator of Ornithology from 1901 to 1906. He built up the bird collection, added to the knowledge of their habits, produced a "Key to the Birds of the Hawaiian Group" (1901), and made trips to Molokai, other parts of the main Hawaiian Islands; and to Laysan, Midway, and Marcus Islands. Unable to get along with Brigham, he organized and became president of the Pacific Scientific Institution in 1907, and then joined the faculty of the College of Hawaii as Professor of Zoology in 1909. His wife, Dr. Elizabeth Letson Bryan, was librarian of the College. Both were enthusiastic marine shell collectors. In 1916 Professor Bryan published his thick, pioneer *Natural History of Hawaii.* This did a remarkably good job of discussing both the people and the natural history of these islands, in 596 pages and 117 overcrowded plates. The index filled 69 pages, double column. He told me that, in preparing the material, he made note of every question he had been asked about Hawaii, together with all he had been able to find to answer it. He drew liberally on everything he could find.

Professor and Mrs. Bryan were on sabbatical leave when I arrived at the College of Hawaii. When they returned, early in 1917, the Professor and I came face to face in Hawaii Hall. His bald head shining, his little mustache twitching with his smile, and kindly eyes gleaming, he stretched out his hand saying, "If we are to masquerade around here under the same surname we

might as well get acquainted.'' We never could find a common ancestor, but we remained good friends long after he left the College of Hawaii in 1919. Following an expedition to South America to try to find connections with Polynesia, he became Director of the Los Angeles County Museum, 1921-1940, and died June 18, 1942. I had been Mrs. Bryan's assistant in the library during 1917-1919. She had been in poor health much of this time, and when she died, February 28, 1919, I had to try to keep the library running, in addition to a full course of studies, until Miss Clara Hemenway could be recruited and broken in as the new librarian.

The most academic of Brigham's ''boys'' was Charles Montague Cooke, Jr. (Ph.D. from Yale, 1901). He joined the Museum staff September 19, 1902, and became Curator of Pulmonata in 1907. He continued on the staff, without a break, until his death, October 28, 1948. Known to his friends and associates as ''Monte,'' he was the acme of kindness and generosity. In later years he not only worked without salary, but was said to have paid the salaries of most of his assistants. Through his drive and enthusiasm he assembled and organized one of the finest and best arranged collections of Pacific land shells in the world. He even carefully preserved the animals of many shells he and others cleaned so that accurate anatomical studies could be made. His great ambition was to lead a scientific expedition into the South Pacific. This was achieved in 1934, at the age of 59, in the highly successful Mangarevan Expedition. He inspired Yoshio Kondo, the engineer of the converted sampan *Islander,* when anchored at islands, to help him collect shells and later to study them; and then to get a Ph.D. at Harvard, where he worked with William J. Clench at the Museum of Comparative Zoology. These two noted malacologists, Kondo and Clench, have written a bio-bibliography and tribute to Dr. Cooke (1953). I need only say that this close and valued friend served Bishop Museum faithfully and well as scientist and trustee.

I never met Dr. William H. Dall, Honorary Curator of Mollusks, 1899-1919, after which he was Consulting Naturalist until his death, March 27, 1927. He came to Bishop Museum from the U. S. National Museum, August 16, 1899, for two months to examine and advise the trustees regarding the Andrew Garrett shell collection, which they bought.

Not exactly one of Brigham's ''boys,'' but a pioneer on the Museum staff was John W. Thompson, preparator from 1898 until he resigned to go to Florida, where he died March 15, 1928. His ''studio,'' when I joined the staff, occupied most of the ground floor, mauka side of Paki Hall. Here, surrounded by paint, plaster, casts, and jars of specimens, Mr. Thompson made replicas of unusual artifacts, fruits, taro corms brought by Garret P.

Charles Montague Cooke, Jr. (in the foreground), on the Mangareven Expedition in 1934 with F. R. Fosberg (top) and E. C. Zimmerman.

Wilder, and fishes large and small. Merchants at the fish markets always saved for him any unusual sea animals that were brought in. His favorite method of casting a fish was to lay it on one side and build up a support of clay to the middle line, meanwhile making notes of the color pattern before this had a chance to fade. Then he threw a few handsful of plaster of Paris into an enamel bowl of water, greased the exterior of the fish and support of modeler's clay with petroleum jelly, gave the plaster mix a brisk stir with a large spoon, and poured the mixture over the half-fish. All this was done casually, John chewing a plug of tobacco and regaling anyone present with yarns of his adventures the while. Almost instinctively he knew just when to

remove the mold from the fish. If the specimen were large, or had undercut parts, he might have to do this in sections.

The next day, or later, he would grease the interior of the mold and fill it to the right level with plaster mix. When sufficiently dry, he would remove the plaster fish and its support, and proceed to paint its surface in a most lifelike manner, using the notes he had made. The fish collection totaled about 600, representing the majority of the fishes found around the Hawaiian reefs, as well as some large pelagic food and game species. The best of these and numerous fruit casts for many years occupied the rail cases and the drawers beneath many large cases of the upper gallery of Hawaiian Hall. He also made casts of unusual artifacts. One series of Hawaiian specimens fitted snugly into a series of four wooden cases to travel. His manner was languid and seemed careless, but he almost never had a failure.

Dr. Brigham never married; in fact, he seemed to have difficulty in getting along with women. However, he tolerated a few on the Museum staff. Miss E. Schupp was librarian from 1907 to 1909, followed by Miss Elizabeth B. Higgins from 1910 until she resigned September 21, 1926, to become a librarian at the University of Redlands, California. She was a sister of a noted horticulturist. There were also three librarians between Miss Higgins and the arrival of Miss Margaret Titcomb in 1931.

In 1911, Mrs. Helen M. Helvie was made Superintendent of the Exhibition Halls, a position she continued to hold until 1920. On August 11, 1919, Mrs. Lahilahi Webb was appointed Guide to Collections in the Exhibition Halls. She had been a companion to Queen Liliuokalani, held a prominent position among Hawaiians, and doubtless was better remembered by the thousands of visitors than anyone else on the Museum staff. She retired in 1942, but remained on the staff as Consultant on Hawaiian History until her death, January 2, 1949.

Charles N. Forbes was the youngest of the major staff members prior to 1919. He joined the staff as Assistant in Botany in 1907, soon after graduating from the University of California, and in 1909 was promoted to Curator of Botany. During the 12 years before I knew him, Charlie had collected on all the main Hawaiian Islands except Niihau, and had also studied and reported upon the plan specimens which Stokes had collected on Niihau. With this background of field observations, he was doing a fine job of classifying and describing native plants, listing the naturalized flora, even dipping into such fascinating subjects as plant succession on lava flows of different age and climatic condition; but he was not a well man.

I was assigned to keep him company on his last field trip and watched him in action. We spent nearly a month, June 11 to July 7, 1920, in the

"ditch trail" area of Maui, ending at Hana and Kipahulu. Trails cut in connection with building the Koolau ditch gave access to almost every ridge and gulch on the northern slope of Haleakala from Kailua to above Nahiku, all of which we explored from about 1,000 to 3,000 feet elevation. It rained every one of the 26 days, at times continuously, weather not helpful to drying plants, catching insects, and living in a tent. The East Maui Irrigation Company had offered us the use of a pack mule, provided we paid the salary of the mule "skinner." When we learned that, with the 200 percent bonus being paid on all salaries except our own, he would receive more per month than the two of us together, we declined the offer. After the initial camp was established, we moved our own tent, apparatus, and supplies. Charles Forbes died August 10, 1920, about a month after our return to the Museum.

A great change in staff and policies in the history of Bishop Museum occurred during the years 1919 and 1920. The patriarchal era of Dr. Brigham came to an end, and the dynamic era of Dr. Herbert E. Gregory began. In 1919 the entire staff (not counting the three janitors) numbered 13. In 1920 the number had grown to 31. Before discussing what had caused this sudden growth, and the nature of the policy changes, let us see what had happened to Dr. Brigham.

The Director's Report for 1919 says: "Since resigning the Directorship, December 31, 1917, William T. Brigham, Director Emeritus, has had the long-desired opportunity to continue his studies without interruption. Considerable progress has been made during the year in the preparation of a memoir on Hawaiian worship." I knew better! We can read between the lines of the 1918 report, prepared by J.F.G. Stokes, Curator in Charge, that Dr. Brigham took a "leave of absence." Having been appointed Director Emeritus, he came back and occupied a room at the northeast corner of the second floor of Paki Hall. All of the entomological collections were in the little room next door, so I was his next door neighbor. Dr. Brigham, finding me a sympathetic, or at least a neutral listener, spent considerable time talking to me. He never got two doors farther down the hall to where Dr. Gregory had his office. He was a very lonely and frustrated old gentleman. He couldn't get his mind onto the subject of Hawaiian worship or anything except his dislike for the new regime. I used to make an occasional call at the Brigham residence on Judd Street, where he died January 29, 1926.

The major reason for the sudden increase in the Museum staff, 13 to 31 in one year, was because of Dr. Gregory and his connections. He was chairman of the Committee on Pacific Investigations of the National Research Council. This group included Clark Wissler, Curator of Anthropology at the American Museum of Natural History; T. Wayland Vaughan, of the U.S.

Herbert E. Gregory, Director of Bishop Museum, 1920 to 1936.

Geological Survey, an authority on corals; William Bowie, of the U.S. Coast and Geodetic Survey; Barton W. Evermann, Director of the California Academy of Sciences, and others interested in the Pacific. It was their planning which brought about the First Pan-Pacific Scientific Conference, held in Honolulu in August, 1920. Dr. Gregory added various leaders in Pacific scientific work to the Museum's staff as honorary advisers. But to increase the paid staff required more money. Getting this can be traced to Dr. Gregory's connection with Yale, where he continued to teach geology one semester a year. The Yale-Bishop Museum agreement also had been promoted by the fact that the President of the Museum Trustees, Albert F. Judd, and one of the Museum's most prominent scientists, Dr. Cooke, were enthusiastic Yale alumni. When Yale alumnus Bayard Dominick, of New York City, gave a substantial sum to Yale for work in anthropology, it was placed at the disposal of Bishop Museum.

There was still the problem of finding personnel to make an anthropological survey of Polynesia. More than once I heard Dr. Gregory remark that it was much harder to find qualified scientists than to get money to pay them. No wonder one of the principal recommendations of the Pan-Pacific Scientific Conference, 1920, was for the training of scientists to work in the Pacific. This in turn strengthened the cooperative agreement, not only with Yale, but also with the University of Hawaii, "whereby scientific research and the training of investigators may be promoted."

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